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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/763,439 | 01/23/2004 | Richard J. Gallagher | 59474.21700 | 6832 |
| 30734 | 7590 | 01/20/2006 | | |
| BAKER & HOSTETLER LLP WASHINGTON SQUARE, SUITE 1100 1050 CONNECTICUT AVE. N.W. WASHINGTON, DC 20036-5304 | | | EXAMINER EREZO, DARWIN P | |
| | | | ART UNIT 3731 | PAPER NUMBER |

DATE MAILED: 01/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/763,439

Applicant(s)

GALLAGHER ET AL.

Examiner

Darwin P. Erez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-12 and 14-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-12 and 14-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103 - Previously Presented

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 5-12, 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,062,846 to Oh et al. in view of US 5,501,693 to Gravener.

(claims 1-3, 8) Oh teaches a surgical clip **10** comprising a first **12** and second **14** leg members joined by a resilient hinge **16**, each leg member having an inner and outer surface, the first leg member terminating at its distal end in a deflectable hook **22** member curved toward the second leg member, the second leg member terminating at its distal end in a locking portion complementary to the hook member, the hook member having a continuously curved outer surface (Fig. 1). Oh also teaches a means for securing the vessel when the clip is in the closed position (protrusions **1302,1304**). However, Oh is silent with regards to the clip comprising complementary parts of an interlock mechanism formed along a portion of the vessel clamping inner surface of each of the first and second leg members; and wherein the interlock mechanism includes a ridge portion and a groove portion that are aligned when the clip is in the closed position.

Gravener also teaches a surgical clip for occluding a vessel comprising a first and second arm, and wherein complementary parts of an interlock mechanism is

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formed along a portion of the vessel clamping inner surface of each of the first and second leg members, wherein the interlock mechanism includes a ridge portion **36** and a groove portion **38**; and wherein the ridge and groove portions are aligned in the closed position (Fig. 6)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the clip of Oh to include the interlock mechanism taught by Gravener because the ridge and groove (tongue and groove, as recited in the reference) mechanism provides for a high degree of clamping force that is optimum for vessel occlusion and clip retention (Gravener; col. 1, lines 53-55; col. 3, lines 43-45).

(claims 11, 12 and 15) The above combination of Oh/Gravener teaches all the limitation of the claims, as recited in the rejections above, and including a clip-locking mechanism formed by said deflectable hook member **22** formed at the distal of said first leg member and a complementary locking portion **61** at the distal end of the second leg portion; wherein the hook member deflects about the distal end of the second leg member to lock the clip in a closed position (transitioning from Fig. 1 to Fig. 3).

(claims 14 and 16) As seen in Fig. 2 of Gravener, both the ridge and the groove extends along the inner surface of either the first and second legs from a proximal end to a distal end.

(claims 5, 9 and 17) Oh teaches the first leg member having a concave inner surface and a convex outer surface; and the second leg member having a convex inner surface and a concave outer surface (Fig. 1).

(claims 6-7, 10 and 18) Oh teaches the clip having bosses (68,70,72,74) coupled to the first and second leg members for engagement with a clip applier, the bosses joined in pairs to opposite sides of the first leg member between the hinge and the hook portion, and to opposite sides of the second leg member at the distal end of the second leg member, the second leg member having sharp pointed members extending from the bosses (Fig. 6).

Response to Arguments

3. Applicant's arguments filed 10/31/05 have been fully considered but they are not persuasive.

4. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). For this case, the base reference to Oh teaches all the limitations of the claims (e.g., leg members, locking mechanism, etc.) but fails to teach an interlocking mechanism as recited in the claims. However, Gravener also teaches a surgical clip, with the clip including an interlocking mechanism for providing a high degree of clamping force that is optimum for vessel occlusion and clip retention (Gravener; col. 1, lines 53-55; col. 3, lines 43-45). That is, the arrangement of a ridge and groove clamping surfaces provides for better clip

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retention on a vessel. Therefore, the motivation to combine the references comes directly from the Gravener reference itself. It should be noted that the Gravener reference is merely being used as a teaching reference for only interlocking mechanism and that the device of Oh is the one being modified with said interlocking mechanism. Therefore, the arguments regarding the material used in the Gravener reference is irrelevant.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Darwin P. Erez who telephone number is (571) 272-4695. The examiner can normally be reached on M-F (7:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anhtuan T. Nguyen can be reached on (571) 272-4963. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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GLENN K. DAWSON
PRIMARY EXAMINER